CLAIMS

WHAT IS CLAIMED IS:

1. A method of manufacturing an integrated circuit comprising:
providing a substrate, the substrate including a layer including germanium;
providing a gate structure above the substrate;
pre-cleaning the substrate with an argon and hydrogen plasma; and
siliciding the substrate.

2. The method of claim 1, wherein the pre-cleaning utilizes a hydrogen argon plasma.

3. The method of claim 1, wherein the pre-cleaning also utilizes an HF dip.

4. The method of claim 1, further comprising:
exposing the substrate to a wet bath.

5. The method of claim 1, wherein the gate structure includes a polysilicon conductor.

6. The method of claim 5, wherein the polysilicon conductor is pre-cleaned and silicided.

7. A method of pre-cleaning a top surface of an IC substrate before silicidation in a chamber, the method comprising:
providing a plasma including hydrogen in the chamber; and
removing native oxide from the IC substrate.

8. The method of claim 7, further comprising providing a wet bath to reduce a thickness of the native oxide.

9. The method of claim 8, wherein the wet bath utilizes hydrofluoric acid.

10. The method of claim 8, wherein the chamber is a vacuum chamber and a metal layer is deposited on the IC substrate in the chamber after the pre-clean step.

11. The method of claim 10, wherein the thickness of the native oxide on the IC substrate is eliminated using the wet bath.

12. The method of claim 7, further comprising providing a silicide layer.

13. The method of claim 7, further comprising evacuating the chamber.

14. The method of claim 7, wherein the plasma includes argon.

15. The method of claim 7, wherein the IC substrate includes a germanium containing gate conductor.

16. The method of claim 7, wherein the chamber is part of a deposition tool.

17. A method of manufacturing a transistor on an integrated circuit, the method comprising:

providing a gate structure on a top surface of a strained silicon layer or a silicon germanium layer;

providing a plasma including hydrogen and argon to remove a native oxide material; and

siliciding the top surface.

18. The method of claim 17, further comprising utilizing hydrofluoric acid to remove a portion of the native oxide material before providing the plasma including hydrogen and argon.

19. The method of claim 18, wherein the siliciding is a nickel siliciding process.

20. The method of claim 19, wherein the top surface includes a silicon/germanium gate conductor.